

# BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

# COMMENTS AND RECOMMENDATIONS OF THE MINNESOTA DEPARTMENT OF COMMERCE ENERGY FACILITY PERMITTING STAFF

DOCKET NO. IP 6603/WS-06-1327

Meeting Date:	November 2, 2006
Company:	Ridgewind Power Partners, LLC
Docket No.	PUC Docket Number: IP 6603/WS-06-1327 In the Matter of a Site Permit Application for the Ridgewind Power Partners, LLC, 24 to 27-Megawatt Ridgewind Power Plant in the Minnesota Counties of Pipestone and Murray.
Issue(s):	Should the Commission accept, conditionally accept, or reject the Site Permit Application?
	If the application is accepted, should the PUC: A) Appoint a public advisor; B) Make a preliminary determination on whether a draft site permit may be issued or should be denied; and C) Authorize a draft site permit for distribution and public comment.
DOC Staff:	Larry B. Hartman
Relevant Documents (in Commission Packet)	
Application of Ridgewind Power Partners, LLCOctober 13, 2006	

The enclosed materials are the work papers of the Department of Commerce Energy Facility Permitting Staff. They are intended for use by the Public Utilities Commission and are based on information already in the record unless otherwise noted.

This document can be made available in alternative formats, i.e., large print or audio tape by calling (651) 201-2202 (Voice) or 1-800-627-3529 (TTY relay service).

#### **Documents Attached**

1. Proposed Draft Site Permit

See eDockets (06-1327) or the PUC website at: <a href="http://energyfacilities.puc.state.mn.us/Docket.html?Id=18865">http://energyfacilities.puc.state.mn.us/Docket.html?Id=18865</a> for project related documents.

# **Statement of the Issues**

- 1) Should the Public Utilities Commission (the PUC or Commission) accept, conditionally accept, or reject the application of Ridgewind Power Partners, LLC?
- 2) Appoint a public advisor?
- 3) Should the Commission make a preliminary determination on whether a site permit may be issued or denied and authorize a draft site permit?

# **Introduction and Background**

A site permit from the Public Utilities Commission is required to construct a Large Wind Energy Conversion System (LWECS), which is any combination of wind turbines and associated facilities with the capacity to generate five megawatts or more of electricity. This requirement became law in 1995. Minnesota Statutes, sections 116C.691 through 116C.697. The rules to implement the permitting requirement for LWECS are in Minnesota Rules Chapter 4401.

Between 1995 and June of 2005, the EQB issued 11 site permits for LWECS projects, totaling approximately 630 Megawatts and the PUC has issued four site permits for LWECS projects totaling approximately 465 MW. These LWECS projects have ranged in size from 10 MW to 205 MW and have been or are being built in the Minnesota counties of: Lincoln, Pipestone, Murray, Nobles, Jackson, Martin, Dodge, Mower and Cottonwood.

# The Applicant and Project Ownership

The Applicant (Ridgewind Power Partners, LLC) will own the Project including all equipment up to the high side of the 115 kV busbar at the Chanarambie substation.

Project Resources Corporation (PRC) is submitting this application, on behalf of Ridgewind Power Partners, LLC.

#### **Project Location**

The proposed bifurcated project site is located in Pipestone and Murray counties, just east of the town of Woodstock in Pipestone County. In Pipestone County, the turbines will be placed in the township of Burke (Section 1) and in Murray County, the turbines will be located in Cameron Township in the following sections (east half of 20, west half of 28, 29 and the west half of 33). The proposed site is comprised primarily of agricultural lands. It is anticipated that the area of direct land use for the turbines and associated facilities would be approximately 60 acres and this would include approximately 4.2 miles of 16 foot wide gravel access roads. The Applicant has easements or options on the land necessary within the site to build the project. Land rights will encompass the proposed wind farm and all associated facilities, including but not limited to wind and buffer easements, wind turbines, access roads, electrical collection system, and transmission lines located on public roads when necessary.

#### Ridgewind Power Project, LLC Project Description

The proposed project may use up to 16 General Electric 1.5 MW wind turbine generators (or a turbine of comparable utility grade that may vary from 1.5 to 3 MW in size). The final number of turbines will depend on the final project design and the model of turbines employed. The towers will be up to a maximum height of 100 meters (328 feet) in height. The blades on the wind turbine will be up to approximately 45 meters (148 feet) long, resulting in a maximum overall height of the wind turbines of up to approximately 145 meters (476 feet). The rotor diameter will be up to a maximum of approximately 90 meters (295 feet).

The rotor consists of three blades mounted to a rotor hub. The hub is attached to the nacelle, which houses the gearbox, generator, brake, cooling system, and other electrical and mechanical systems. The maximum rotor swept area is 6,362 meters<sup>2</sup> (68,389 feet<sup>2</sup>). The rotor will make between 8.8 and 22.2 revolutions per minute, depending on the turbine model used. Maximum rotor tip speed is 183 miles per hour.

The electrical collector system will consist of underground 34.5 kV collection lines and facilities providing step-up transformation.

Other project components include: all-weather class 5 access roads of gravel or similar materials, pad-mounted step-up transformers, concrete and steel tower foundations, a supervisory control and data acquisition system, meteorological towers, and an operations and maintenance building.

Power from the project will be delivered to the Chanarambie Substation.

A Certificate of Need from the Minnesota Public Utilities Commission (PUC) is not required because the project does not exceed the Certificate of Need project size threshold.

# **Regulatory Process and Procedures**

**Application Acceptance.** Minnesota Rules, part 4401.0460 states that: "Within 30 days after receipt of an application for a site permit, the PUC shall accept, conditionally accept, or reject the application." On October 13, 2006, Project Resources Corporation filed a site permit

application for the Ridgewind Power Partners, LLC, 27 MW Ridgewind Power Plant LWECS Site Permit Application with the Public Utilities Commission. The required contents of a site permit application are specified in Minnesota Rules, part 4401.0450.

**Public Advisor**. Minnesota Rules, part 4401.0470 states: "Upon acceptance of an application for a site permit, the PUC shall designate a staff person to act as the public advisor on the project." The Commission can authorize the Department to name a staff member from the EFP staff as the public advisor or assign a PUC staff member.

**Preliminary Determination.** Minnesota Rules, part 4401 0500 Subpart 1. states that: "Within 45 days after acceptance of the application by the PUC, the PUC shall make a preliminary determination whether a permit may be issued or should be denied. If the preliminary determination is to issue a permit, the PUC shall prepare a draft site permit for the project. The draft site permit must identify the permittee, the proposed LWECS, and proposed permit conditions."

# **DOC EFP Staff Analysis and Comments**

The LWECS site permit application was reviewed by DOC EFP staff pursuant to the requirements of Minnesota Rules Chapter 4401 (Wind Siting Rules). The application provides all of the information required by Minnesota Rules, part 4401.0450. Acceptance of the application will allow staff to initiate the review requirements of Chapter 4401.

EFP staff used the information in the application and experience with other LWECS projects as a guide for evaluating whether a permit may be issued for the project or should be denied, pursuant to Minnesota Rules, part 4401 0500 Subpart 1. EFP staff finds that the available information is sufficient to conclude that it is appropriate to make a preliminary determination to issue a site permit for the project. EFP staff has prepared a draft permit identifying the permittee, the proposed LWECS, and proposed permit conditions. See attached document # 1 in the Commissioner's packet. Commission approval of the draft site permit will allow for distribution of the Draft Site Permit and comment by state and local units of government and the public.

# **Commission Decision Options**

# A. Application Acceptance

- 1. Accept the Ridgewind Power Partners, LLC Site Permit Application for a 24 to 27 Megawatt Large Wind Energy Conversion System (LWECS)
- 2. Reject the site permit application as incomplete and issue an order indicating the specific deficiencies to be remedied before the Application can be accepted.
- 3. Find the Application complete upon the submission of supplementary information.
- 4. Make another decision deemed more appropriate.

#### B. Public Advisor

- 1. Authorize the Minnesota Department of Commerce Energy Facilities Permitting staff to name a public advisor for this project.
- 2. Appoint a PUC staff person as public advisor
- 3. Make another decision deemed more appropriate.

# C. Preliminary Determination on Issuance of a Proposed Draft Site Permit

- 1. Make a preliminary determination to issue a site permit.
- 2. Make a preliminary determination to deny a draft site permit until additional information is available.
- 3. Take up to the 45 days provided by rule to issue a proposed draft site permit.
- 4. Make another decision deemed more appropriate

# D. Proposed Draft Site Permit

- 1. Authorize the issuance of a proposed draft site permit as proposed by DOC EFP staff.
- 2. Review the proposed draft site permit and make a decision on the issuance of a proposed draft site permit within 45 days.
- 3. Make another decision deemed more appropriate.

**DOC EFP Staff Recommendation:** Staff recommends option A 1, B 1, C 1 and D 1.